(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 090 560 A2

(12) EUROPEAN PATENT APPLICATION

(43) Date of publication:
11.04.2001 Bulletin 2001/15

(51) Int Cl.[7]: **A41B 13/10**

(21) Application number: **00308813.5**

(22) Date of filing: **06.10.2000**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **06.10.1999 GB 9923650**

(71) Applicant: **The Robbo Company Limited**
Maryhill, Glasgow G20 9BE (GB)

(72) Inventor: **Robson, Jephson**
Glasgow G12 OXE (GB)

(74) Representative: **Kennedy, David Anthony**
Kennedys Patent Agency Limited,
Floor 4, Queens House,
19-29 St Vincent Place
Glasgow G1 2DT (GB)

(54) Protective bib

(57) A baby bib has two catchment components, namely a flexible sheet (1) and a catchment means (6) typically formed as a trough. The flexible sheet (1) is made of a rubber material, thereby providing excellent hygienic and elastic properties.

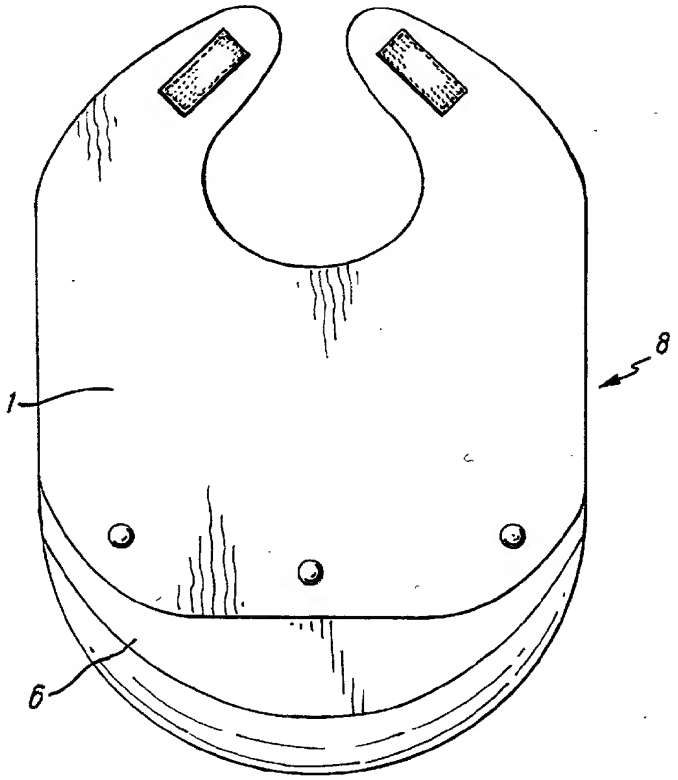


FIG.3

EP 1 090 560 A2

Description

[0001] The present invention relates to a protective neck bib as is used to prevent spilled substances from staining a baby's clothing.

[0002] It is common when feeding babies to use a protective bib, which is draped around the baby's neck in order to prevent saliva or foodstuffs from coming into contact with and soiling the baby's clothing. Conventionally these bibs are made of a woven material which can eventually become soaked with saliva, spilled drinks or food. As a result the baby's clothing can also become soaked, rendering it necessary to change and launder both the bib and underlying clothing. An additional disadvantage is that the bib is typically fastened around the baby's neck via a tie which can carry the risk of choking should it become knotted or caught, or can loosen thereby leaving a gap around the neck through which food can fall.

[0003] More recently, it has become common to provide baby bibs manufactured from a more rigid protective material such as plastic which have a cup shaped means for catching dropped food at the bottom. However whilst these plastic bibs offer better protection to the baby's underlying clothing and can be easily wiped clean they carry a disadvantage in that they can bear rough edges and may therefore be uncomfortable to wear. Furthermore plastic bibs can be restrictive to the baby's motility and may cause injury if, for example, the baby falls over whilst wearing one. For this reason plastic bibs are usually only put on the baby prior to a meal and taken off after feeding. It would therefore be advantageous to provide a protective baby bib which offers superior protection to the baby's clothing and is easily cleaned, but is also comfortable so that the baby can wear it continuously.

[0004] It is an object of the present invention to provide a protective baby's neck bib wherein said neck bib protects the baby's clothing from spilled foodstuffs, is easily cleaned, does not hinder the baby's motility and can be worn continuously.

[0005] Until now, probably the closest disclosure at achieving this and other objectives is found in US Patent4,569,086 ("Takefman"). Takefman teaches of a baby bib which comprises an apron member made of a flexible plastic material which attaches to a rigid trough shaped member.

[0006] While this goes some way to achieving a preferrable product in mitigating the problems heretofor associated with the prior art, it still has certain disadvantages. For example, the material properties of plastic, even in a flexible form, are not as elastic as would be desirable for ensuring a snug and comfortable fit around a baby's neck. Plastic does not also present possibilities for the attachment means to the trough member as does the present invention.

[0007] According to the present invention there is provided a protective neck bib comprising a protective sheet of non-woven flexible rubber material, wherein said protective sheet has an integrally formed collar, and a detachable catchment means for spilled food which can be fitted to, or removed from, the protective sheet when desired.

[0008] Preferably the protective bib further comprises fastening means for fastening the sheet material around the baby's neck. Preferably said fastening means is a hook and loop fastener such as Velcro (Trade Mark) which can be attached to the sheet material by stitching.

[0009] Preferably the catchment means for dropped food is a detachable cup-shaped trough.

[0010] Preferably, the flexible sheet material is detachably fixable to the catchment means by a fixation means, the fixation means suitably comprising a plurality of apertures formed in the sheet material which correspond positionally to male components formed in the catchment means. Ideally these male components would be formed as mushroom heads which co-operate with the elastic properties of the rubber sheet material, whereby the apertures formed in the sheet material may be stretched to pass over the mushroom heads after which they are adapted to elastically contract forming a strong non-destructive detachable fixation means.

[0011] The apertures may be preformed as circular holes, or alternatively may be provided as slits adapted to open up when stretched.

[0012] Optionally said detachable cup-shaped trough is also used as a means for packaging and storing the protective sheet.

[0013] Also according to the present invention there is provided a catchment means for catching dropped food wherein said catchment means is attachable to a person's clothing or apparel. In this case the male components of the fixation means may fit into openings in the clothing or apparel.

[0014] Alternatively the fixation means include a hook and loop fastener such as Velcro (Trade Mark).

[0015] Preferably the catchment means is a cup-shaped trough.

[0016] An example embodiment of the invention will now be illustrated with reference to the following Figures in which:

Figure 1 is a front view of a protective sheet in accordance with the present invention;

Figure 2 is a pictorial view of a cup-shaped trough, and;

Figure 3 is an illustration of a protective bib comprising the protective sheet of Figure 1 attached to the cup-shaped trough of Figure 2.

[0017] Referring firstly to Figure 1, a protective sheet is generally depicted at 1. The protective sheet 1 is rubber and therefore has elasticity and flexibility. The sheet has a front chest portion 2 and collar 3. The collar 3 has

fastening means 4a and 4b in the form of a hook and loop fastener, e.g. Velcro (Trade Mark) which is secured to the collar 3 by stitching. The front chest portion 2 has openings 5, the number of which is not limited but is nominally 3, to allow attachment to a detachable cup-shaped trough.

[0018] The rubber material may be a natural rubber, such as Latex, and this is potentially preferable as it is a renewable natural occurring resource, that has positive environmental implications. It may, however, alternatively be a synthetic rubber where there is a greater scope for optimising the material properties, in terms of elasticity, durability, heat resistance (for washing), strength and so on.

[0019] The properties of rubber are also desirable in that it is the most suitable material for compatibility with a specific user's anatomy. In particular, the integral rubber collar provides for a snug fit around a baby's neck, notwithstanding the inconsistencies of various babies neck dimensions, and thus mitigates the likelihood of food falling behind the bib.

[0020] In Figure 2 a detachable cup-shaped trough is generally depicted at 6. The trough 6 is shaped so as to catch spillage of food. Fixation means 7 are provided in the form of projections or male components which fit into the openings 5 of the protective rubber sheet 1 of Figure 1.

[0021] It is realized in the present invention that there is benefit in terms of both manufacturing cost and hygiene if the fixation means can be made from the same materials as the catchment means and flexible sheet with which they are associated. It is particularly advantageous if these fixation devices can be formed integrally with the respective components of the bib. This avoids the need for metallic studs and stud receivers, the adhering of hook and loop fasteners and so on.

[0022] Again, the elastic nature of rubber enables the apertures to be sized to provide a stretch fit in relation to the male components and this provides a secure attachment which can be deployed by an adult, but not by an infant.

[0023] In Figure 3 the protective bib is generally depicted at 8 with the rubber sheet 1 of Figure 1 attached to the detachable cup shaped trough 6 of Figure 2.

[0024] The appearance of the bib can be enhanced by applying graphics onto the protective sheet or trough.

[0025] An advantage of the invention lies in the ability to clean the catchment means between meals, while a child still wears the protective rubber sheet part of the bib. Yet further, the catchment means may be made of materials particularly suited to dishwasher cleaning and may be shaped to provide optimum catchment functionality in a way that might not be suitable if the catchment means required to be worn at all times the bib was worn.

[0026] The present invention is inherent with significant advantages in that unlike rigid plastic bibs, known to the art, the rubber protective bib will not restrict motility or hurt the baby if he/she falls over. However unlike woven material bibs, the rubber bib of the present invention will not become soaked and can be easily wiped cleaned.

[0027] Further modifications and improvements may be incorporated without departing from the scope of the invention herein intended.

Claims

1. A protective neck bib comprising a protective sheet (1), wherein said protective sheet has an integrally formed collar (3), and a detachable catchment means (6) for spilled food which can be fitted to, or removed from, the protective sheet (1) when desired, characterised in that the protective sheet is made of a non-woven flexible rubber material.

2. A protective bib as claimed in Claim 1, further comprising fastening means (4) associated with the collar for fastening the sheet material around a user's neck.

3. A protective bib as claimed in Claim 2, wherein the fastening means is a hook and loop fastener such as Velcro (Trade Mark).

4. A protective bib as claimed in any one of the preceding Claims, wherein the catchment means for spilled food is a detachable cup-shaped trough.

5. A protective bib as claimed in any one of the preceding Claims, wherein the flexible sheet material is detachably fixable to the catchment means by a fixation means (5,7), the fixation means comprising a plurality of apertures (5) formed in the sheet material which correspond positionally to male components (7) formed in the catchment means.

6. A protective bib as claimed in Claim 5, wherein the male components are formed as mushroom heads which co-operate with the elastic properties of the rubber sheet material, whereby the apertures formed in the sheet material may be stretched to pass over the mushroom heads after which they are adapted to elastically contract forming a non-destructive detachable fixation means.

7. A protective bib as claimed in any one of the preceding Claims, wherein said catchment means is also adapted to be used as a means for packaging and storing the protective sheet.

8. A catchment means formed as a trough for catching dropped food wherein said catchment means is attachable to a person's clothing or apparel.

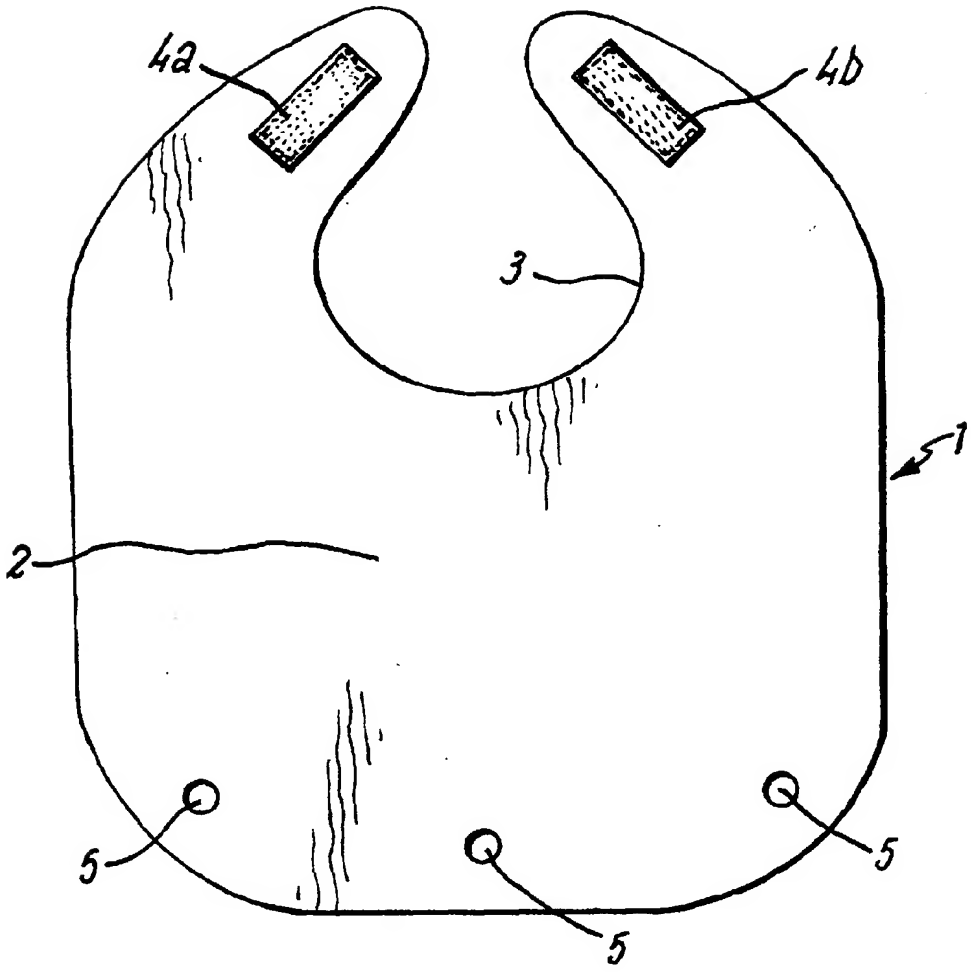


FIG.1

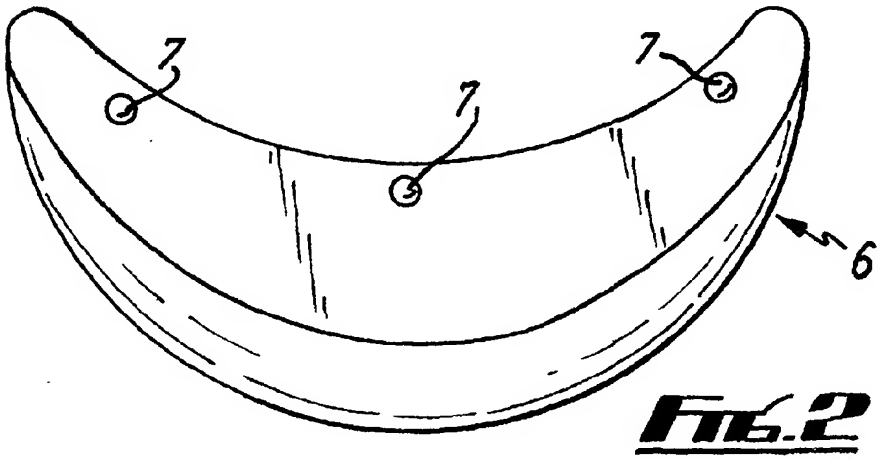
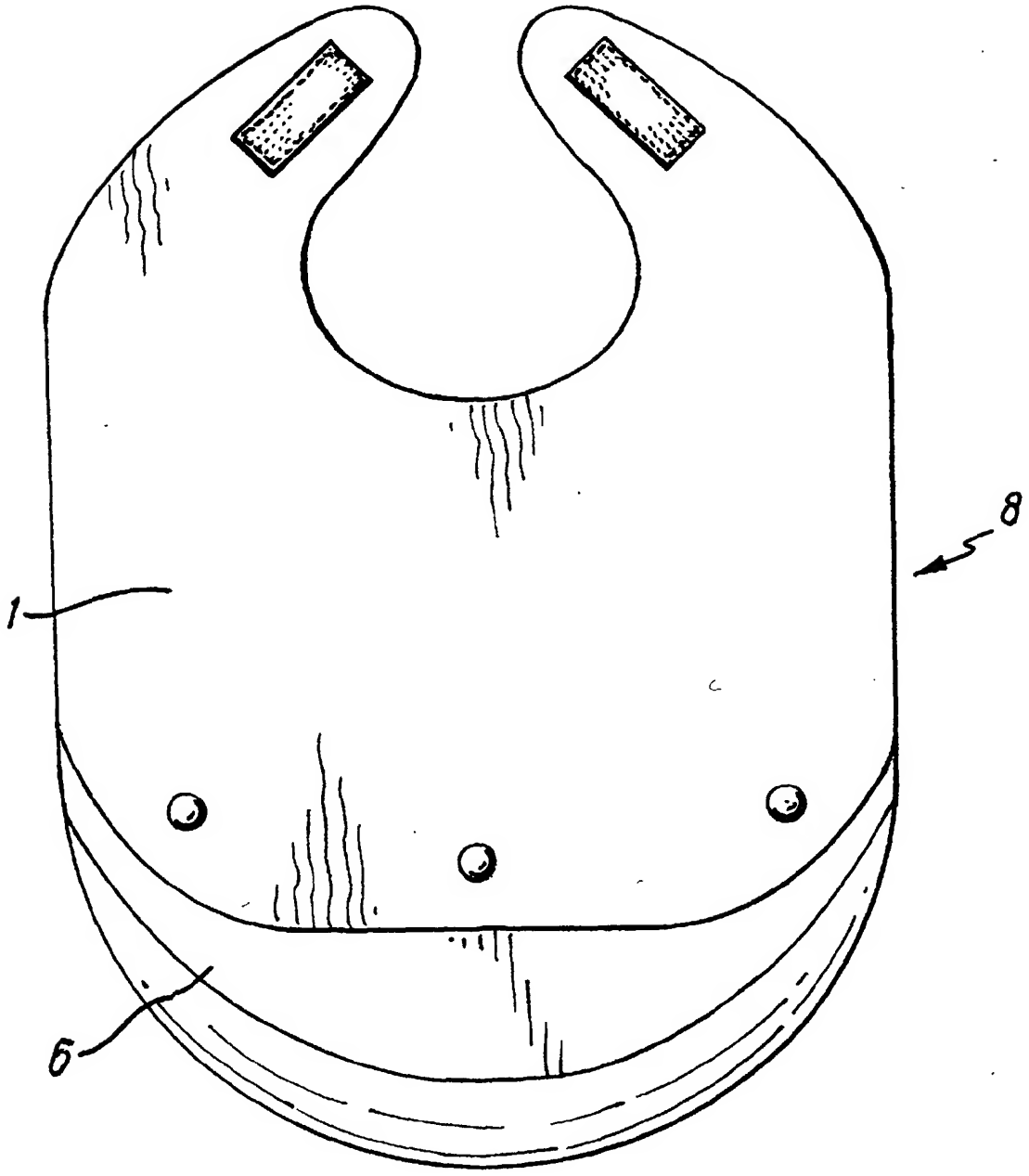


FIG.2



ФИГ. 3